U.S Army Corp of Engineers CalFed Levee System Integrity Program Collinsville Levee Project January 31, 2006 Page 3 of 3

The project proposes to raise and reinforce the existing levee structure. Therefore, no changes in magnitude, frequency, or duration of flood flows are anticipated as a result of the project.

The proposed project would protect a town of 22 residential homes and surrounding lands from floodwater inundation. Currently, there are no planned non-structural designs that can fulfill the requirements to reinforce the levee system and protect the town.

The project would be benefited from the town's people of Collinsville, PG&E, and owners of the surrounding property that is protected by the Collinsville levee system including the Montezuma Fire District, Solano County, and nearby towns and areas including Bird's Landing and Montezuma.

The only support received is through assistance from Solano County that assists the Levee District until the Collinsville Levee District is functional and from PG&E as a property owner and portion of the levee owner.

Currently the Collinsville levee is maintained by the Collinsville Levee District for the portion they own and through PG&E for their portion. A cooperative agreement should be made between both parties before the project can be initiated.

Since the request for proposal was referred to the County by the Delta Protection Commission, in light of no current governing Board existing for the Collinsville Levee District and between meeting dates of the Board of Supervisors, the question of how and who will be involved in cost sharing is unclear and will need to be resolved prior to any project commencing. In addition, the Board of Supervisors and Collinsville Levee District will need to consider and take action regarding assuming the non-Federal sponsor role. However, rather than miss the call for project proposals made by the Corp of Engineers at this time we are submitting a project for your review and consideration.

If you have any questions or need further information, please contact myself or my staff, Misty Kaltreider at (707) 784-6765.

Thank you for considering this Proposal

Sincerely,

Birgitta Corsello Director

CC: Mike D. Johnson, CAO
Mike Reagan, Solano County Supervisor, 5th District
Vince Ferrari, Collinsville Levee District
Kenneth Richerson, PG&E
Chief Stan Simi, Montezuma Fire Protection District

& City of Stockton



COUNTY OF SAN JOAQUIN

OFFICE OF EMERGENCY SERVICES
ROOM 610, COURTHOUSE
222 EAST WEBER AVENUE
STOCKTON, CA 95202
TELEPHONE (209) 468-3962
HAZARDOUS MATERIALS DIVISION (209) 468-3969

January 30, 2006

Colonel Ronald N. Light, District Engineer Sacramento District U.S. Army Corps of Engineers 1325 J Street Sacramento, CA 95814

Dear Colonel Light:

This letter conveys the intent of the City of Stockton and the County of San Joaquin to participate in feasibility studies and/or other actions in the development of the Stockton Regional Wastewater Control Facility Flood Protection Project as non-Federal sponsors consistent with the CALFED Bay-Delta Authorization Act (PL108-361).

The above agencies understand that the type, cost, and scope of actions will be determined and specified later if selected for development and/or implementation pursuant to the Act. The City of Stockton and the County of San Joaquin understand that if our project is approved for implementation, we will be responsible for sharing the cost of planning, designing, and implementation of the project with the U.S. Army Corps of Engineers and providing all necessary lands, easements, rights-of-way, relocations, excluding railroads, and suitable borrow and dredged or excavated material disposal areas and accomplishing operation, maintenance, repair, replacement and rehabilitation of the project. The responsibilities for local cost sharing are indicated in the attached proposal.

Please note that this letter of intent is not an obligation of funds. We must further reserve the right to review our ability to continue to participate in the project in the event that the local cost share is calculated by your agency to significantly exceed the amount calculated from the cost estimates included in the attached proposal. We further request participation of the State of California in meeting local cost share requirements.

If you have any questions on this submittal, please give me a call at (209) 468-3962.

14/1

RONALD I. BALDWIN

Director of Emergency Operations

REB/hld Attachments

c: Lester Snow, Director, Department of Water Resources

STOCKTON REGIONAL WASTEWATER CONTROL FACILITY FLOOD PROTECTION PROJECT

PROJECT NAME AND PURPOSE

The Stockton Regional Wastewater Control Facility Flood Protection Project has the purpose of ensuring that floodwaters that could result from at least three different levee failure scenarios do not cause an extended loss of service to over 300,000 customers with resulting major threats to public health, water quality, and Delta ecosystems.

LOCATION

The Stockton Regional Wastewater Control Facility is located at 2500 Navy Drive in the City of Stockton, County of San Joaquin. The Primary Facility is located within Reclamation District 404 and is physically located on the east side of the San Joaquin River directly adjacent to the district levee. The Primary Facility was situated at the minimum mean sea level elevation of Reclamation District 404 to assist with gravity flow of waste effluent from the service area to the plant. The plant's Tertiary Treatment Ponds, along with associated systems and equipment, are located on the west side of the San Joaquin River in Reclamation District 524 directly across the river from the Primary Facility.

PROBLEMS

Flood contingency planning jointly undertaken by officials from the City of Stockton, County of San Joaquin, and Reclamation District 404 in the summer of 2005 identified two critical threats to continued operation of the regional treatment plant in the event of a flood in the Stockton area.

- 1. The Primary Facility located at 2500 Navy Drive is vulnerable to surface flooding to depths that would render the plant inoperable for an extended period of time from at least three different levee failure scenarios.
- 2. The Primary Facility located at 2500 Navy Drive is vulnerable to internal flooding that would render the plant inoperable for an extended period of time due to flood waters entering system waste water lines as a result of a variety of levee failure scenarios in the Stockton area.

Flooding of the Stockton Regional Wastewater Control Facility would terminate sewage services for over 300,000 residents that would result in a significant public health hazard. There would be a major risk that sewage lines would back up into residences if residents were left in place in areas otherwise still dry. This would result in damage to residences, an increased risk of an outbreak of contagious diseases, and potential major costs to

evacuate and relocate the affected population. The flooding of the Facility would also create a major threat to water quality in the Sacramento-San Joaquin Delta. Raw sewage from the Primary Facility would be mixed and eventually released into waterways along with floodwaters. There would be a longer period of releases of untreated effluent into waterways due to the longer period needed to return the plant to operation.

An additional threat to the Tertiary Ponds located on the west side of the San Joaquin River in Reclamation District 524 from flooding in Roberts Island is being addressed through a hazard mitigation grant proposal being processed through the 2004 Jones Tract Flood (DR-1529) recovery process. That grant proposal to raise the berms protecting the Tertiary Treatment Ponds is currently under NEPA review at the Federal level.

OPPORTUNITIES

Three opportunities for protecting the Stockton Regional Wastewater Control Facility from flooding were identified in the flood contingency mapping process. The problems and solutions are summarized as follows.

- The current head works located in the wastewater lines leading to the Primary
 Facility are no longer operational. If the head works were rebuilt, along
 with any necessary bypass systems, this would allow Facility operators to prevent
 internal flooding of the Primary Facility from floodwaters entering the wastewater
 lines.
- 2. Failure of the Reclamation District 404 levee south of the Burlington Northern Santa Fe (BNSF) railroad tracks would lead to flooding of the plant. No emergency actions at the time of the flood could prevent this contingency. Failure of the Reclamation District 404 levees north of the BNSF railroad berm would lead to flooding of the plant if waters could not be held along the railroad berm. A floodwall built around the Primary Facility located at 2500 Navy Drive would prevent surface flooding of the plant from these two failure scenarios.
- 3. Failure of the Diverting Canal/Mormon Slough levees east of Stockton could lead to surface flows that could flood the Primary Facility if no action is taken. A floodwall as indicated in Opportunity #2 would protect the plant from this further contingency. There is an addition possibility that floodwaters could be held along Interstate 5 and diverted back into the Stockton Deep Water Channel east of the Interstate, thereby better protecting the plant as well as approximately \$200,000,000 in property.

PROJECT DESCRIPTION

In 2003, the San Joaquin County Office of Emergency Services began funding the development of flood contingency maps for areas vulnerable to flooding. These flood contingency maps identify, along with historic, topographical, and survey data, key public safety threats from levee failures along with options for minimizing the loss of

life, injury, or property. The flood contingency mapping process for the Central/South Stockton area was initiated in early 2005. As a result of this effort, officials from the City of Stockton, the County of San Joaquin, and Reclamation District 404 identified several critical public safety flood vulnerabilities that would have a regional impact on public health and the environment.

The most critical, and potentially widespread, impact identified was the vulnerability of the Stockton Regional Wastewater Control Facility located at 2500 Navy Drive to flooding. The plant was located at a low mean sea level elevation in relation to surrounding topography in order to allow gravity flow of waste effluent from sections of the district service area to the Primary Facility. Floodwaters from at least three levee failure scenarios would also tend to flow to this point due to this situation. The three failure scenarios, with a brief analysis, are as follows.

The Primary Facility is located on the westside of Reclamation District 404 to the south of the Stockton Deep Water Channel. Reclamation District 404 is bisected east to west by the Burlington Northern Santa Fe (BNSF) railroad tracks which are elevated on an earthen berm. In the vicinity of the Facility, Navy Drive crosses the railroad berm via an underpass. No other dry land levees, or other elevated east-west linear structures, exist in the District.

In the event that the RD404 levee fails south of the BNSF railroad berm the Stockton Regional Wastewater Control Facility will be flooded. There are no reasonable options for preventing the loss of the Facility. In the event that the RD404 levee fails north of the BNSF railroad berm, an attempt can be made to prevent waters from reaching the Facility by building a ring dike around the Navy Drive underpass. The ability of such a ring dike, as well as the railroad berm, to hold floodwaters for an extended period of time is not certain and failure of these structures would lead to flooding of the Facility.

The last historic flood in the City of Stockton, which occurred in 1955, was caused by the failure of the Diverting Canal/Mormon Slough levee system on the eastside of the City. Floodwaters moved west through downtown and South Stockton to a point near present Interstate 5. Interstate 5 did not exist at that time but McDougal Slough did exist at that location. This slough ran north south along the present path of Interstate 5 to a point south of Charter Way. A back levee to protect RD404 also ran along the slough. In the 1955 flood, Corps of Engineers personnel diverted floodwaters arriving from the East into McDougal Slough and thence into the Stockton Deep Water Channel. This action stopped the westward movement of floodwaters into RD404.

Since 1955, McDougal Slough has been nearly entirely filled in. Only portions of the slough exist and the back levee is only represented at this time by low rises in Charter Way and other streets as they cross its previous location. The only feasible option for protecting RD404 from a flood event similar to the 1955 flood would consist of blocking the underpasses through Interstate 5 and diverting water back into the Stockton Deep Water Channel on the eastside of the Interstate. The current BNSF railroad track berm currently serve as a barrier to such a diversion effort although there is a potential for

diverting floodwaters into storm water lines on the westside of the Interstate. More detailed studies would be needed to identify whether this option could be implemented in a manner that would minimize any adverse impacts on other areas.

In addition to the above surface flood threats to the Regional Wastewater Control Facility, the flood contingency discussions determined that the current head works that were intended to allow control of floodwaters flowing down waste water lines to the plant are extremely old and are no longer reliable to perform this critical service. Therefore, even if surface floodwaters were kept from the Facility, the plant would flood internally from this uncontrolled flow in their primary service lines.

This proposed flood protection project would address this critical threat to public safety and the ecosystem by implementing the following actions:

- 1. Design and construction of new head works and bypass system in waste water lines leading to the Primary Facility in order to prevent flooding of the Facility by floodwaters entering underground waste-water lines in flooded areas. Project cost is estimated at \$1,500,000 with a local cost share of \$525,000 which will be provided by the City of Stockton in the event that State assistance with the local share is not forthcoming.
- 2. Design and construction of a floodwall around the Primary Facility that would prevent entry of surface floodwaters into the Facility grounds in the event of failure of primary flood control levees. Project cost is estimated at \$2,000,000 with a local cost share of \$700,000 which will be provided by the City of Stockton in the event that State assistance with the local share is not forthcoming.
- 3. Completion of a hydrological study that would determine the feasibility of using Interstate 5 to hold floodwaters arriving from the eastside of Stockton and diverting those waters back into the Stockton Deep Water Channel without undue adverse impact on other areas. The study would identify actions that would be needed, before or after a flood, to make this option feasible. In addition, the study would determine arrival times and eventual depths of floodwaters from two failure points on the Diverting Canal/Mormon Slough levees to assist with evacuation planning. The total cost of this study is estimated at \$200,000 with a local cost share of \$70,000 which would be equally shared by the City of Stockton and the County of San Joaquin in the event that State assistance with the local share is not forthcoming. We would request the Corps of Engineers also budget an additional \$250,000 to this project as a contingency in case some structural work is identified that would be needed to make this option work. An additional local cost share commitment could be made at the time that any needed construction is identified and reviewed.

STATE OF WILLINGNESS AND ABILITY TO COST SHARE

Two local jurisdictions are willing and able to provide the local cost share to this proposed project as written. The City of Stockton Municipal Utility Department would provide the cost share for design and construction of the new head works and floodwall around their Regional Wastewater Control Facility. The City of Stockton and County of San Joaquin would jointly provide the local cost share for the hydrological study to determine the feasibility of using the Interstate 5 embankment to prevent flooding of RD404 and diverting floodwaters into the Stockton Deep Water Channel while minimizing adverse impacts on other areas.

These jurisdictions reserve the right to review participation in this project if subsequent Corps of Engineers evaluations cause the local cost share to increase above those identified in this proposal. Local agencies would have to review their ability to meet any absolute costs share amounts above the \$1,295,000 included in this proposal.

These jurisdictions are further requesting that the State of California assist with meeting local cost share requirements.

POINTS OF CONTACT

Agency: San Joaquin County Office of Emergency Services

Contact: Ronald E. Baldwin, Director

Phone: (209) 468-3962

Agency: City of Stockton Municipal Utility Department

Contact: Mark Madison, Director

Phone: (209) 937-8750

Agency: City of Stockton Office of Emergency Services

Contact: Al Anton, Director Phone: (209) 937-8801

SCOPING AND SCREENING INFORMATION

The tremendous impact on public health and water quality that would result from the flooding of the Regional Wastewater Control Facility serving over 300,000 residents makes the effort to flood proof the Facility to the extent that is humanly possible a high priority. Flooding of the Facility would create an imminent threat to life and health, would contaminate property and critical habitat, and would greatly delay and complicate the recovery of the community and the ecosystem from a flood disaster.

The construction of improved head works and a floodwall around the Facility, and the study of options to protect the plant from floodwaters arriving from the eastside of Stockton, would not change the magnitude, frequency, or duration of flood flows in other areas. The hydrological study of the use of Interstate 5 to divert flood flows into the

Stockton Deep Water Channel would identify options that would not have significant adverse impacts on other areas.

The project would provide a high degree of certainty that the Regional Wastewater Control Facility would not be flooded in the event of a failure of the primary flood control structures in the Stockton area and would thereby prevent or lessen the impact on water supply and quality, public health, and the ecosystem from such an eventuality.

The local flood contingency mapping process has not identified non-structural ways to address this problem outside of the potential option for using Interstate 5 to divert surface waters from the treatment plant. That option would need a more detailed study to determine its feasibility. The construction of improved head works and a floodwall would still be needed.

The project would benefit the City of Stockton, unincorporated areas of the County of San Joaquin serviced by the Regional Wastewater Control Facility, and ecosystems in the vicinity of the Facility.

The primary concerns for project delays or overruns center on the Federal project process. Environmental impacts should be negligible or non-existent.

The City of Stockton and the County of San Joaquin are willing and able to serve as non-Federal sponsors as indicated above with caveat that local cost share amounts that may be required above those calculated from project cost estimates contained in this proposal may require a review of their ability to continue to participate.

Al Anton, Director

City of Stockton
Office of Emergency Services

Mark Madison, Director City of Stockton

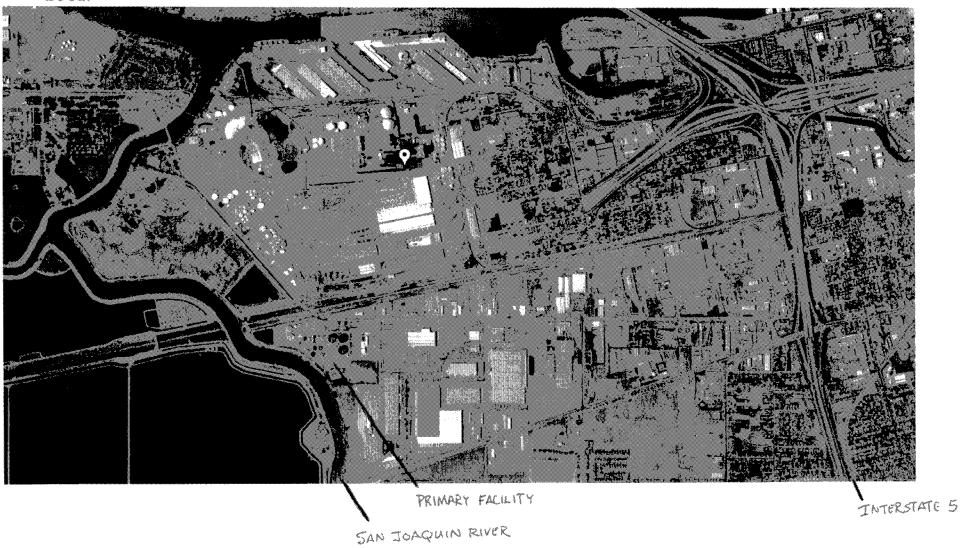
Municipal Utility Department

'Ronald Baldwin, Director
San Joaquin County
Office of Erpergency Services

Office of Emergency Services

1/26/2006





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